

**AMENDMENTS TO THE CLAIMS**

**This listing of claims will replace all prior versions and listings of claims in the application:**

**LISTING OF CLAIMS:**

1. (Previously Presented): A slitter blade assembly for cutting off a workpiece, comprising:

a drum-shaped rotary blade; and

a disk-shaped rotary blade;

said disk-shaped rotary blade having a cutting edge, a first beveled surface facing said drum-shaped rotary blade and progressively spaced from said drum-shaped rotary blade toward said cutting edge, and a second beveled surface facing the workpiece and progressively spaced from said cutting edge away from the workpiece, wherein a first distance (CL) of said first beveled surface up from said cutting edge along a severance plane perpendicular to a surface of the workpiece is set to a value which ranges from 40 $\mu$ m to 200 $\mu$ m and a first angle ( $\theta_6$ ) of said first beveled surface from said severance plane is set to a value which ranges from 0.8° to 14°.

2. (Previously Presented): A slitter blade assembly according to claim 1, wherein a second angle ( $\theta_1$ ) of said second beveled surface from said severance plane is set to a value which ranges from 65° to 85°.

3. (Previously Presented): A slitter blade assembly according to claim 2, wherein said disk-shaped rotary blade has a first clearance surface contiguous to said first beveled surface, and a third angle ( $\theta_3$ ) of said first clearance surface from said severance plane is set to a value which ranges from 2° to 5°.

4. (Previously Presented): A slitter blade assembly according to claim 2, wherein said disk-shaped rotary blade has a second clearance surface contiguous to said second beveled surface, and a fourth angle ( $\theta_2$ ) of said second clearance surface from said severance plane is set to a value which ranges from  $20^\circ$  to  $45^\circ$ .

5. (Previously Presented): A slitter blade assembly according to claim 4, wherein said second beveled surface and said second clearance surface are joined to each other at a junction, and a second distance (L1) from said junction to said severance plane is set to a value which ranges from 0.2 mm to 0.8 mm.

6. (Previously Presented): A slitter blade assembly for cutting off a workpiece, comprising:

a drum-shaped rotary blade; and

a disk-shaped rotary blade;

said disk-shaped rotary blade having a cutting edge, a first beveled surface facing said drum-shaped rotary blade and progressively spaced from said drum-shaped rotary blade toward said cutting edge, and a second beveled surface facing the workpiece and progressively spaced from said cutting edge away from the workpiece, wherein said cutting edge of the disk-shaped rotary blade has irregularities along a circumference of the disk-shaped rotary blade, said irregularities having an irregularity quantity (G) set to a value which ranges from  $0.5\ \mu\text{m}$  to  $5\ \mu\text{m}$ .

7. (Original): A slitter blade assembly according to claim 1, wherein said disk-shaped rotary blade and/or said drum-shaped rotary blade is made of a cemented carbide.

8. (Withdrawn): A slitter blade assembly for cutting off a workpiece, comprising:

a drum-shaped rotary blade; and

a disk-shaped rotary blade;

said drum-shaped rotary blade having a cutting edge and a third beveled surface facing said disk-shaped rotary blade and progressively spaced from said disk-shaped rotary blade toward said cutting edge.

9. (Withdrawn): A slitter blade assembly according to claim 8, wherein the distance HL of said third beveled surface up to said cutting edge along a severance plane perpendicular to a surface of the workpiece is set to a value which ranges from 25  $\mu\text{m}$  to 500  $\mu\text{m}$ , and the angle  $\theta_5$  of said third beveled surface from said severance plane is set to a value which ranges from 0.0° to 0.6°.

10. (Withdrawn): A slitter blade assembly according to claim 9, wherein said drum-shaped rotary blade has a third clearance surface contiguous to said third beveled surface, and the angle  $\theta_4$  of said third clearance surface from said severance plane is set to a value which ranges from 2° to 4°.

11. (Withdrawn): A slitter blade assembly according to claim 8, wherein said disk-shaped rotary blade and/or said drum-shaped rotary blade is made of a cemented carbide.

12. (Withdrawn): A slitter blade assembly for cutting off a workpiece, comprising:

a drum-shaped rotary blade; and

a disk-shaped rotary blade;

said disk-shaped rotary blade having a cutting edge, a first beveled surface facing said drum-shaped rotary blade and progressively spaced from said drum-shaped rotary blade toward said cutting edge of the disk-shaped rotary blade, and a second beveled surface facing the

workpiece and progressively spaced from said cutting edge of the disk-shaped rotary blade away from the workpiece;

said drum-shaped rotary blade having a cutting edge and a third beveled surface facing said disk-shaped rotary blade and progressively spaced from said disk-shaped rotary blade toward said cutting edge of the drum-shaped rotary blade.

13. (Withdrawn): A slitter blade assembly according to claim 12, wherein said disk-shaped rotary blade and/or said drum-shaped rotary blade is made of a cemented carbide.

14. (Withdrawn): A slitter blade assembly according to claim 12, wherein the distance CL of said first beveled surface up to said cutting edge along a severance plane perpendicular to a surface of the workpiece is set to a value which ranges from 40  $\mu\text{m}$  to 200  $\mu\text{m}$ , the angle  $\theta_6$  of said first beveled surface from said severance plane is set to a value which ranges from 0.8° to 14°, the angle  $\theta_1$  of said second beveled surface from said severance plane is set to a value which ranges from 65° to 85°, the distance HL of said third beveled surface up to said cutting edge along a severance plane is set to a value which ranges from 25  $\mu\text{m}$  to 500  $\mu\text{m}$ , and the angle  $\theta_5$  of said third beveled surface from said severance plane is set to a value which ranges from 0.0° to 0.6°.

15. (Previously Presented): A slitter blade assembly according to claim 1, wherein said cutting edge is spaced apart from the severance plane perpendicular to a surface of the workpiece.

16. (Previously Presented): A slitter blade assembly according to claim 1, further comprising a means for rotating the drum-shaped rotary blade in unison with the disk-shaped rotary blade.

17. (Previously Presented): A slitter blade assembly for cutting off a workpiece, comprising:

a drum-shaped rotary blade; and

a disk-shaped rotary blade;

said disk-shaped rotary blade having a cutting edge, a first beveled surface facing said drum-shaped rotary blade and progressively spaced from said drum-shaped rotary blade toward said cutting edge, and a second beveled surface facing the workpiece and progressively spaced from said cutting edge away from the workpiece, wherein the drum-shaped rotary blade is disposed on a drum shaft, the disk-shaped rotary blade is disposed on a disk shaft, and the slitter blade assembly further comprising means for transmitting driving force between the drum shaft and the disk shaft.

18. (Currently Amended): A slitter blade assembly according to claim 6, wherein said irregularities having ~~one of~~ a saw-tooth shape and/or an undulating shape and said irregularity quantity being a distance from a bottom to a top of one of the irregularities.

19. (Previously Presented): A slitter blade assembly according to claim 17, wherein the drum shaft and the disk shaft are operably connected to rotate in unison.

20. (Currently Amended): A slitter blade assembly according to claim 17, wherein the ~~the~~ means for transmitting the driving force comprises gears.

21. (New): A slitter blade assembly according to claim 6, wherein the drum-shaped rotary blade comprises at least one groove and the disk-shaped rotary blade is operable to enter the at least one groove of the drum-shaped rotary blade.

22. (New): A slitter blade assembly according to claim 6 further comprising a plurality of disk-shaped rotary blades, wherein the disk-shaped rotary blade is one of a plurality of a disk-shaped rotary blades, the drum-shaped rotary blade comprises a plurality of grooves, each of the plurality of disk-shaped rotary blades corresponding to one of the plurality of grooves.

23. (New): A slitter blade assembly according to claim 22, wherein the plurality of grooves are disposed on a surface of the drum-shaped rotary blade.

24. (New): A slitter blade assembly according to claim 17, wherein the drum-shaped rotary blade comprises at least one groove and the disk-shaped rotary blade is operable to enter the at least one groove of the drum-shaped rotary blade.

25. (New): A slitter blade assembly according to claim 17 further comprising a plurality of disk-shaped rotary blades, wherein the disk-shaped rotary blade is one of a plurality of a disk-shaped rotary blades, the drum-shaped rotary blade comprises a plurality of grooves, each of the plurality of disk-shaped rotary blades corresponding to one of the plurality of grooves.

26. (New): A slitter blade assembly according to claim 25, wherein the plurality of grooves are disposed on a surface of the drum-shaped rotary blade.